

REMARKS

The rejection of claims 1 and 3-11 Under 35 U.S.C. §103 as being unpatentable over the Lokhoff '219 patent in combination with the Timmerman's '210 patent as been obviated by canceling these claims, and by adding new claims 12-20. However, before the patentable merits of the new claims are discussed, a brief recap of the invention will be made so that the language used in the new claims may be more fully appreciated.

The principal object of the present invention is to prevent the reproduction of encrypted main data in a recording medium that has been illegally copied. As is known in the prior art, where a medium has not been illegally copied, the main data is recorded in the primary recording region after being encrypted, and the key information for decoding the main data is recorded in a secondary recording region located on the internal periphery of the medium. During reproduction, the code of the main data is read by using the key information. Unfortunately, when the main data has been illegally copied, if the key information for decoding the main data is also copied to the external periphery, the main data may be reproduced by using this information. According to the present invention, in order to inhibit the reproduction of the encrypted main data that has been illegally copied, the secondary recording region has a track which wobbles at a second pitch different from the first pitch or does not wobble. Additionally, information pits are formed along the track of the secondary recording region to record a signal representative of control information which includes an invalid key information item for inhibiting reproduction of the main data encrypted in the primary recording region. As a result, the reproduction of the encrypted main data can be controlled by the key information recorded in the internal periphery and the reproduction of the encrypted main data recorded in the primary recording region due to illegal copying may be prevented.

New claim 12 specifically recites the features which are responsible for the aforementioned advantageous operation of the invention. New claim 12 recites a disc-shaped recording medium comprising a primary recording region and a secondary recording region which is located on the side of an internal periphery of the

primary recording region, wherein the primary recording region has a track which wobbles at a first pitch along which a user is able to record a data signal, and the secondary recording region has a track which wobbles at a second pitch different from the first pitch or does not wobble,

“and along which information pits are formed to record a signal representative of control information, ..”

claim 12 further recites that the control information in the secondary recording region includes, as data,

“an invalid key information item for inhibiting reproduction of main data encrypted in set primary recording region..”

None of the references of record either discloses or suggests the recording medium defined in new claim 12. While the Lokhoff '219 patent discloses a track in a medium which wobbles at a second pitch different from a first pitch or does not wobble, and further discloses a servo track having a lead-in track 24a provided with a pattern of pits for accurately locating a radiation beam, (see col. 6, lines 30-48), this reference fails to disclose a second recording region having a track

“along which information pits are formed to record a signal representative of control information... wherein said control information...includes... an invalid key information item for inhibiting reproduction of main data encrypted in the primary recording region.”

For this reason alone, claim 12 is patentable over the '219 patent.

The Timmermans '210 patent is similarly irrelevant, albeit for different reasons. As the Examiner concedes in the last Office Action, there is no disclosure or suggestion of “information pits” in this reference. While the Examiner has pointed to lines 1-17 of column 7 of this reference as disclosing the recited

“invalid information item for inhibiting reproduction of main data encrypted...”,

applicants' attorney submits that the cited portion of Timmerman's discloses only that a de-encryption code may be programmed or recorded within the information

↓
disk

applicant does this

recovery circuit. Such a de-encryption code is not the same as the claimed “invalid key information item” which inhibits reproduction.

Nor is new claim 12 rendered “obvious” in view of any tenable combination of the Lokhoff ‘219 and Timmermans ‘210 patents. As previously pointed out, neither of these patents discloses or suggest that the recited second recorded region has a track

“along which information pits are formed to record a signal representative of control information.. [which includes]... an invalid formation item for inhibiting reproduction of [encrypted] main data...”

And even if the ‘210 patent did disclose the claimed “invalid information item”, the Examiner has not provided any incentive, teaching or motivation that would suggest, to a person of ordinary skill in the art, that these two references should be combined. For all these reasons, new claim 12 is clearly patentable over any tenable combination of the Lokhoff and Timmermans patents.

Claims 13 and 14 at least by reason of their dependency upon new claim 12.

New claim 15 is patentable not only by reason of its dependency upon new claim 12, before its recitation that the reproducing apparatus comprises a pick-up for reading a signal from the recording medium under rotation, a means for shifting the pickup, a means for distinguishing a reproduction location of the recording medium is the track which wobbles at the first pitch or the track that wobbles at the second pitch or does not wobble,

“wherein in case where according to said means for distinguishing the reproduction location of said recording medium, the reproduction location is said primary and the main data encrypted in said primary recording region are being recorded, recording region having said track which wobbles at first pitch, said pick up is shifted to said secondary recording region by said means for shifting said pick up, and the reproduction of the main data encrypted in said primary recording region is inhibited by the invalid key information item included in said control information in said secondary recording region..”

By contrast, the Lokhoff ‘219 patent relates to a recording device that prevents the illegal recording of music data in a PC recording media by presetting the function for music data recording or computer data recording. As the Lokhoff ‘219 patent neither discloses or suggests the aforementioned functional limitations, dependent

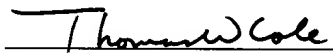
claim 15 is clearly patentable over this reference. Moreover, dependent claim 15 is similarly patentable over the Timmermans '210 patent, as there is no disclosure or suggestion of a reproducing apparatus that functions in the aforementioned manner. For all these reasons, new claim 15 is clearly patentable over a tenable combination of the Lokhoff and Timmermans patent.

As the balance of the claims 16, 17, 18 and 19 are each dependent upon claim 15, each of these claims is likewise patentable for at least the reasons given with respect to claim 15.

Finally, new claim 20 is patentable not only for its dependency on claim 12, but for its recitation that said control information is de-cryption information, a limitation not remotely suggested in the Lokhoff patent.

Now that all the claims are believed to patentable, the prompt issuance of a Notice of Allowance and Issue Fee Due is hereby earnestly solicited.

Respectfully submitted,



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